



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/990,268	11/23/2001	Isabelle Amonou	1807.1894	2410
5514	7590	12/05/2006	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			JUNG, DAVID YIUK	
			ART UNIT	PAPER NUMBER
			2134	

DATE MAILED: 12/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/990,268

Applicant(s)

AMONOU ET AL.

Examiner

David Y. Jung

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected:
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

CLAIMS PRESENTED

Claims 1-33 are presented.

CLAIM REJECTIONS

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 7-13, 19-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over 513 reference (cited by French Patent Office, Cox, EP0840513A2) and Barni (M. Barni, F. Bartolini, A. De Rosa, and A. Piva, Capacity of the watermark channel: how many bits can be hidden within a digital image? Proc. SPIE, vol. 3657, pp. 437-448, San Jose, CA, January 1999). Examiner Marie-Julie of the French Patent Office cited the particular similarities between 513 and the claims of the priority application. The subject matter of claims 1-28 of the priority application corresponds to claim 1-28 of this application. The subject matter of claims 1, 13, 11, 12 of the priority application corresponds to claims 29-33 of this application.

Regarding claim 1, 513 teaches "A method of inserting a message in a subset of digital data representing physical quantities, characterized in that the method includes the steps of: a) estimating a capacity to receive a message for said subset, b) selecting ... from a set of messages ... a message having a size less than or equal to the estimated capacity, and c) inserting the selected message in the said subset of digital data -- page 3, column 3, lines 45-53; column 5, lines 48-58; page 6, column 10, line 13 to page 7, column 11, line 5; page 7, column 12, line 13-48; i.e., the various ways in which the water mark signals are inserted with different ordering and with different components).

513 does not teach the newly added limitations.

Barni teaches such "selecting, based on a size of the message compared to the estimated capacity and from a set of messages representing a same message with each having a different number of bits, a message having a size less than or equal to the estimated capacity section 3, statistical modeling of DCT coefficients; section 4, statistical modeling of DFT coefficients, especially the last paragraph, which notes the watermark-channel capacity – thus, the passage teaches to select a size within the capacity, this selection of size being naturally being chosen so as to have a size that is less than the size of others with different bits)" for the motivation of having effective watermarking (section 1, Introduction, especially the first paragraph, which discusses the maximum number of bits during the watermarking process).

Art Unit: 2134

Hence, it would have been obvious to those of ordinary skill in the art at the time of the claimed invention to combine 513 and Barni for the motivation noted in the previous paragraphs so as to teach the claimed invention.

Regarding claims 7-11 (various ways of segmenting and combining), 513 mentions these features at page 3, column 3, lines 45-53 and discusses them in more detail at column 5, lines 48-58; page 6, column 10, line 13 to page 7, column 11, line 5; page 7, column 12, line 13-48. Note the particular correlation handlings of 513 which teach the coefficient handlings of claims 7-11.

Regarding claim 12 (extraction, etc.) note Figure 9. This figure shows the extraction that handles the watermark signal handlings that had taken place during the processes noted at page 3, column 3, lines 45-53; column 5, lines 48-58; page 6, column 10, line 13 to page 7, column 11, line 5; page 7, column 12, line 13-48.

Regarding claims 13, 19-28, these claims are device analogs to method claims 1, 7-12. For the reasons noted in the rejections of claims 1, 7-12, these claims are not patentable.

Regarding claims 29-33, these claims recite the physical storage media and executables. Note column 1, lines 3-23 which discusses the various digitized media and hardware devices.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2134

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-6, 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over 513 (cited by French Patent Office, Cox, EP0840513A2) and 468 (cited by French Patent Office, Cox, EP0766468A2) and Barni (M. Barni, F. Bartolini, A. De Rosa, and A. Piva, Capacity of the watermark channel: how many bits can be hidden within a digital image? Proc. SPIE, vol. 3657, pp. 437-448, San Jose, CA, January 1999). Examiner Marie-Julie of the French Patent office cited the particular similarities between 468 and the claims of the priority application.

In the following paragraphs, unless otherwise noted, the referred claims are that of this US patent application.

Regarding claims 2-6 (various sizing handlings), 513 teaches as noted in the previous paragraphs. 513 does not teach the exact details of these sizings. 468 teaches the various scale parameter handlings (page 7, column 11, line 19 to page 9, column 15, line 35) which of course suggests the sizings for the motivation of having effective watermarking (noted throughout 468, such as at column 11, lines 29-45). Barni teaches such selecting, based on a size of the message compared to the estimated capacity and from a set of messages representing a same message with each having a different number of bits, a message having a size less than or equal to the estimated capacity section 3, statistical modeling of DCT coefficients; section 4, statistical

Art Unit: 2134

modeling of DFT coefficients; especially the last paragraph, which notes the watermark-channel capacity – thus, the passage teaches to select a size within the capacity, this selection of size being naturally being chosen so as to have a size that is less than the size of others with different bits) for the motivation of having effective watermarking (section 1, Introduction, especially the first paragraph, which discusses the maximum number of bits during the watermarking process).

Hence, it would have been obvious to those of ordinary skill in the art at the time of the claimed invention to combine the teachings of 513 and of 468 and of Barni for the motivations noted in the previous paragraphs so as to teach the claimed invention.

Regarding claims 14-18, these claims are device analogs to method claims 2-6. For the reasons noted in the rejections of claims 2-6, these claims are not patentable.

Conclusion

The art made of record and not relied upon is considered pertinent to applicant's disclosure. The art disclosed general background.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

Art Unit: 2134

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Points of Contact

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(571) 273-8300, (for formal communications intended for entry)

Or:

(571) 273-3836 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Art Unit: 2134

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Jung whose telephone number is (571) 272-3836 or Jacques Louis-Jacques whose telephone number is (571) 272-6962.

David Jung

A handwritten signature in black ink, appearing to be 'DJ' followed by a long horizontal stroke.

Patent Examiner

11/26/06